

# PATENT COOPERATION TREATY

## PCT

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### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference opp031294KR	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/KR 2004/001781	International filing date (day/month/year) 16 July 2004 (16.07.2004)	Priority Date (day/month/year) 18 July 2003 (18.07.2003)
International Patent Classification (IPC) or national classification and IPC  IPC <sup>8</sup> : H04L 12/56 (2006.01)i, H04B 7/26 (2006.01)i, G06F 17/00 (2006.01)i		
Applicant ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE		

- This international preliminary examination report has been prepared by this International Preliminary Examination Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

- This report contains indications relating to the following items:

- ☒ Basis of the opinion
- ☐ Priority
- ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Lack of unity of invention
- ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Certain documents cited
- ☐ Certain defects in the international application
- ☐ Certain observations on the international application

Date of submission of the demand  3 February 2005 (03.02.2005)	Date of completion of this report  13 January 2006 (13.01.2006)
Name and mailing address of the IPEA/AT Austrian Patent Office Dresdner Straße 87 A-1200 Vienna Facsimile No. 1/53424/200	Authorized officer  ENGLISCH M.  Telephone No. 1/53424/565

Form PCT/IPEA/409 (cover sheet) (July 1998)

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR 2004/001781

**I. Basis of the report****1. With regard to the elements of the international application:\***☒ the international application as originally filed☐ the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☐ the claims:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, as amended (together with any statement) under Article 19

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☐ the drawings:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☐ the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**☐ contained in the international application in printed form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.**4. ☐ The amendments have resulted in the cancellation of:**☐ the description, pages \_\_\_\_\_.☐ the claims, Nos. \_\_\_\_\_.☐ the drawings, sheets/fig \_\_\_\_\_.**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as „originally filed“ and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/KR 2004/001781

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement			
Novelty (N)	Claims	3, 5, 7, 10, 12, 14	YES
	Claims	1, 2, 4, 6, 8, 9, 11, 13	NO
Inventive step (IS)	Claims	----	YES
	Claims	1-14	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims	----	NO

### Citations and explanations (Rule 70.7)

The following documents have been cited in the Search Report:

D1: US2002/0168944A1

D2: Sarikaya B.; Packet mode in wireless networks: overview of transition to third generation; Communications Magazine, IEEE, Volume: 38, Issue: 9 Sep 2000; pages: 164-172; XP 011091357

D1 features a wireless digital communication method for communicating between a base station and a plurality of user equipment mobile terminals (UEs) and employs adaptive modulation and coding (AM&C). The modulation and channel encoding level is determined according to the channel characteristics. In advance of the data transmission, the base station informs the UEs via a common control channel of the allocated radio resources, including coding rate, modulation type and allocated slots.

Therefore, all relevant features of claims 1 to 2, 4, 6, 8 to 9, 11 and 13 can be found in D1. Accordingly, the subject-matter of said claims can not be considered new and does not involve an inventive step. The subject-matter of the remaining claims relates to features which are well known to a person skilled in the art in the context of the independent claims. Therefore, they are considered not to involve an inventive step.

D2 gives an overview of the packet mode in GPRS. It describes the so called 52-multiframe, which consists of 12 blocks of 4 frames to which several packet mode logical channels can be mapped. A multislot mobile station (MS) can be assigned up to eight slots in any frame of any of 12 blocks. Radio configurations (RCs), which specify the data rates, channel encoding, and modulation parameters supported on the traffic channel are mentioned, too. D2 describes that the forward common control channel (F-CCCH) is used by the BS to transmit MS-specific messages.

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

International application No.  
PCT/KR 04/01781

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box V (page 1)

However, D2 does disclose the determination of a modulation and channel encoding level according to radio channel characteristics. Therefore, D2 merely represents the prior art.

Industrial applicability is given.